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EXAMINER
FLEARY, CAROLYN FATIMAH

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/046,356	CHENG ET AL.
		Examiner	Art Unit	
		Carolyn F. Fleary	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05/02/2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-34_ is/are pending in the application.

   4a) Of the above claim(s) _1-20_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _21-34_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some *   c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 21 objected to because of the following informalities: The phrase

"termination" is missing in line 14 in between the terms "selected" and "PSTN".   In addition

the term "termination" is missing in line 14 in between the terms ""of" and "PSTN". In order

to clarify claims, Examiner suggest Applicant amend claims to reflect these suggested

changes in order to keep consistency with the phrases "termination PSTN gateway" and

"Plurality of Termination PSTN gateways" recited earlier in the claims. Appropriate

correction is required.

2.   Claim 22 objected to because of the following minor informalities: In line 4 of the

claim the term "selected" should be "select" Appropriate correction is required.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

4.   **Claims 21, 30, and 32-34 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Scott et al. (US 6,760,324) in view of Ma et al.(US 6,795,867).

Scott et al. (US 6,760,324) discloses a Voice-over-internet Protocol (VoIP) system (fig. 2-

#200, col. 6 ll. 22-24), comprising:

- a routing server (230/332 e.g. can be separate or a component of a gateway server

    device-210,220)) forming part of a network (fig. 2) that allows voice data to be

exchanged (col. 6 ll. 24-27) over the network between a VoIP client (201-203,206,207,291,292) and a termination PSTN gateway (210,220) selected by the routing server (col. 16 ll. 38-47) from a plurality of termination PSTN gateways (col. 16 ll. 2-4, col. 16 ll. 16-18,col. 16 ll.22-26) ;

- a gateway monitor(230,210, col. 16 ll. 48-56);

- a routing cost policy server (fig. 2-#240, col. 8 ll. 52-67) configured to provide to the routing server with cost information (col. 8 ll. 56-58, col. 9 ll. 19-30, col. 47 ll. 64-67, col. 48 ll. 1-2; col. 62 ll. 32); and

- a routing plan database (col. 98 –105) configured to provide the routing server with an identification of the VOIP client and, if predetermined for the VoIP client, a specified routing plan (; col. 77 ll. 32-39, col. 60 ll. 2-14 e.g. rule matching) for the VOIP client; and

- wherein in response to a VOIP client request to connect to an analog phone (col. 60 ll. 2-3), the routing server:

    Selects the selected PSTN gateway from the plurality of PSTN gateways based the specified routing plan (e.g. routes from initiating gateway), if predetermined for the VOIP client, else a default routing plan (e.g. blank rule col. 60 ll. 15-18, col. 61 ll. 25-29) ; and (col. 8 ll. 59-66, col. 16 ll. 42-47, col. 16 ll. 58-59, col. 73 ll.43-48)

    provides the VoIP client with a network address (e.g. IP address, col. 73 ll. 43-56) of the selected PSTN gateway for the VOIP client to connect to the selected PSTN gateway to exchange voice data therewith (col. 16 ll. 56-57, col. e.g. IP address associated with a destination gateway).

Scott et al. (US 6,760,324) is silent on:

- said gateway monitor configured to provide the routing server with workload status information for each of the plurality of termination PSTN gateways;

- Selection of said PSTN gateway from the plurality of PSTN gateways is also based on the workload status information.

Ma et al. discloses a VOIP system (fig. 2-3) wherein a routing server (i.e. LMU fig. 2-#220) identifies the termination PSTN gateway (fig. 2- #236) based on workload data (col. 4 ll. 29-38, col. 7 ll. 8-22).

Ma et al., similar to Scott et al., comprise multifunctional gateway devices that can contain routing and monitoring functionality therein. Specifically in the Ma system the routing and monitoring functionality is discloses as functions of an LMU used to identify a gateway based workload data in order to perform load balancing by redirecting calls from a non functional gatekeeper to another one that is functional (see. col. 5 ll. 50-62)

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Scott to also identifying termination gateways based on workload data in order as taught by Ma et al. in order to process a load in an VOIP system event if an assigned gatekeeper is unavailable and allow an overloaded gatekeeper to lesson its load during normal operations (col. 3 ll. 34-40, col. 4 ll. 29-38, col. 7 ll. 8-22).

In regards to claim 30, Scott et al. (US 6,760,324) discloses a method of connecting at least one Voice-over-internet Protocol (VoIP) client(201-203,206,207,291,292) to a selected termination PSTN gateway (210,220) using a networked VoIP system having a routing server(230/332 e.g. can be separate or a component of a gateway server device-210,220)), a gateway monitor(230,210, col. 16 ll. 48-56) and a routing plan database(col. 98 -105); comprising:

- (a) receiving a request from a VOIP client request to connect to an analog phone (col. 60 ll. 2-3), the routing server

- (b) in response to the request, selecting the selected PSTN gateway from the plurality of PSTN gateways based the specified routing plan (e.g. routes from initiating gateway), if predetermined for the VOIP client, else a default routing plan (e.g. blank rule col. 60 ll. 15-18, col. 61 ll. 25-29) ; and (col. 8 ll. 59-66, col. 16 ll. 42-47, col. 16 ll. 58-59, col. 73 ll.43-48)

  providing the VoIP client with a network address (e.g. IP address, col. 73 ll. 43-56) of the selected PSTN gateway for the VOIP client to connect to the selected PSTN gateway to exchange voice data therewith (col. 16 ll. 56-57, col. e.g. IP address associated with a destination gateway).

Scott et al. (US 6,760,324) is silent on:

- selection of said PSTN gateway from the plurality of PSTN gateways is also based on the workload status information.

Ma et al. discloses a VOIP system (fig. 2-3) wherein a routing server (i.e. LMU fig. 2-#220) identifies the termination PSTN gateway (fig. 2- #236) based on workload data (col. 4 ll. 29-38, col. 7 ll. 8-22).

Ma et al., similar to Scott et al., comprise multifunctional gateway devices that can contain routing and monitoring functionality therein. Specifically in the Ma system the routing and monitoring functionality is discloses as functions of an LMU used to identify a gateway based workload data in order to perform load balancing by redirecting calls from a non functional gatekeeper to another one that is functional (see. col. 5 ll. 50-62)

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Scott to also identifying termination gateways based on workload data in order as taught by Ma et al. in order to process a load in an VOIP system event if an assigned gatekeeper is unavailable and allow an overloaded gatekeeper to lesson its load during normal operations (col. 3 ll. 34-40, col. 4 ll. 29-38, col. 7 ll. 8-22).

In regards to claim 32, Scott et al. (US 6,760,324) in view of Ma et al.(US 6,795,867)

discloses the method of claim 30 wherein the wherein the VOIP client is categorized in a

caller group with other VOIP clients and the caller group (See US 6,760,324 e.g. line groups

discloses in col. 55 ll. 35-50. Also forming of call groups based on similar attributes such as

that discloses in col. 60 ll. 60 and col. 61 ll. 44-50) is further used by the routing server to

select the termination PSTN gateway (See US 6,760,324 e.g. routing "rules" are used to

select a gateway for groups as shown in an embodied in col. 61 ll. 44-50) .

In regards to claim 33, Scott et al. (US 6,760,324) in view of Ma et al.(US 6,795,867)

discloses the method of claim 32, wherein the routing plan (e.g. rule matching, col. 60 ll.

1-14,) for the VOIP client is associated with each VOIP client in the caller group (See US

6,760,324 e.g. line groups discloses in col. 55 ll. 35-50. Also forming of call groups based

on similar attributes such as that discloses in col. 60 ll. 60 and col. 61 ll. 44-50).

In regards to claim 34, Scott et al. (US 6,760,324) in view of Ma et al.(US

6,795,867) discloses the method of claim 32 wherein the routing plan for the VOIP client is

a default routing plan (e.g. a blank rule allows all clients to be routed in the case that there

is no specific rule) associated with the caller group (See US 6,760,324 e.g. col. 60 ll. 15-20,

col. 74 ll. 40-47).

5.   Claims 22-29, and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Scott et al. (US 6,760,324) in view of Ma et al.(US 6,795,867)

as applied to claim1 further in view of Scott et al. (US 6,480,898)

In regards to claim 22, Scott et al. (US 6,760,324) in view of Ma et al. discloses the VOIP

system according to claim 21, wherein the plurality of termination PSTN gateways are

configured in a plurality of termination PSTN gateway groups (See Scott col. 84 ll. 42-63),

Scott et al. (US 6,760,324) in view of Ma et al. is silent on each group having a

quality of service designation and the quality of service designations are further used by the

routing server to select the termination PSTN gateway based on a quality of service level

associated with the VOIP client.

Scott et al. (US 6,480,898) discloses a system for a predicting call quality prior to

the establishment of any call in VOIP network (col. 9 ll. 7-14). Scott et al (US 6,480,898).

disclose a plurality of termination gateways configured in a plurality of gateway groups (i.e.

carriers as disclosed in col. 4 ll. 46- 54, col. 7 ll. 10-17) which are designated based on

Quality of Service (col. 7 ll.22-38; 47-48) and the designation is used by the routing server

(fig. 1-#102, col. 5 lines 42-45) to determine and identify a termination PSTN gateway (col.

8 ll. 36-54, col. 9 ll. 7-14)).

It would be obvious to one of ordinary skill in the art at the time of the invention to

modify Scott et al. (US 6,760,324) in view of Ma et al. by having that which is discloses as

being taught by Scott et al. (US 6,480,898) above in to predict quality of a call prior to an

actual establishment of any call by a VOIP client (col. 3 ll. 34-38, col. 9 ll. 7-14)

In regards to claim 23, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al.

(US 6,480,898) discloses the VOIP system according to claim 21, wherein the VOIP client is

categorized in a caller group with other VOIP clients and the caller group (See US 6,760,324

e.g. line groups discloses in col. 55 ll. 35-50. Also forming of call groups based on similar

attributes such as that discloses in col. 60 ll. 60 and col. 61 ll. 44-50) is further used by the

routing server to select the termination PSTN gateway (See US 6,760,324 e.g. routing "rules" are used to select a gateway for groups as shown in an embodied in col. 61 ll. 44-50).

In regards to claim 24, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al. (US 6,480,898) discloses the VOIP system according to claim 23, wherein the caller group is categorized by one or more of a location (See US 6,760,324 col. 62 ll. 11-13, col. 74 ll. 40-47), a priority, a business entity association, or a membership of the client.

In regards to claim 25, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al. (US 6,480,898) discloses the VoIP system according to claim 23, wherein the routing plan (e.g. rule matching, col. 60 ll. 1-14,) for the VOIP client is associated with each VOIP client in the caller group (See US 6,760,324 e.g. line groups discloses in col. 55 ll. 35-50. Also forming of call groups based on similar attributes such as that discloses in col. 60 ll. 60 and col. 61 ll. 44-50).

In regards to claim 26, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al. (US 6,480,898) discloses The VoIP system according to claim 23, wherein the routing plan for the VOIP client is a default routing plan (e.g. a blank rule allows all clients to be routed in the case that there is no specific rule) associated with the caller group (See US 6,760,324 e.g. col. 60 ll. 15-20, col. 74 ll. 40-47).

In regards to claim 27, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al. (US 6,480,898) discloses the VoIP system according to claim 21, wherein the gateway monitor (230) continuously monitors each termination PSTN gateway for status information.

(Scott et al. - US 6,760,324 monitor-230/210 monitors gateways such as 200 for updated

routes or routing information col. 73 ll. 43-56. In addition, Scott et. al.-US 6,480,898

provides a gateway monitor-114a-n for monitoring PSTN gateways-106a-n as discloses in

col.1 7 ll. 29-38 &46-48 for permitting Quality of Service- (QoS)measurements),

In regards to claim 28, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al.

(US 6,480,898) discloses the VOIP system according to claim 21, wherein the gateway

monitor polls each termination PSTN gateway for status information. (Scott et al.-US

6,480,898 teaches interrogation of gateways by gateway monitors-114a-n to determine

status information as disclosed in col. 7 ll. 29-38 & ll. 46-48 in order to collect QoS

measurements and determine if a particular gateway is functional).

In regards to claim 29, Scott et al. (US 6,760,324) in view of Ma et al. in view of Scott et al.

(US 6,480,898) discloses the VOIP system according to claim 21, wherein the status

information includes one or more of a health status, a carrier termination cost, a Quality of

Service of a termination PSTN gateway (See Scott et al.-US 6,480,898, e.g. col. 7 ll. 29-38

& ll. 46-48, col. 9 ll. 27), a termination PSTN gateway malfunction indication? a network

supporting the termination PSTN gateway status, or the availability of resources of the

termination PSTN gateway.

In regards to claim 31, Scott et al. (US 6,760,324) in view of Ma et al. discloses the method

of claim 30 wherein the plurality of termination PSTN gateways are configured in a plurality

of termination PSTN gateway groups (See Scott et al. col. 84 ll. 42-63),

Scott et al. (US 6,760,324) in view of Ma et al. is silent on each group having a

quality of service designation are further used by the routing server to select the

termination PSTN gateway based on a quality of service level associated with the VOIP

client.

Scott et al. (US 6,480,898) discloses a method for a predicting call quality prior to

the establishment of any call in VOIP network (col. 9 ll. 7-14). Scott et al (US 6,480,898).

disclose a plurality of termination gateways configured in a plurality of gateway groups (i.e.

carriers as disclosed in col. 4 ll. 46- 54, col. 7 ll. 10-17) which are designated based on

Quality of Service (col. 7 ll.22-38; 47-48) and the designation is used by the routing server

(fig. 1-#102, col. 5 lines 42-45) to determine and identify a termination PSTN gateway (col.

8 ll. 36-54, col. 9 ll. 7-14)).

It would be obvious to one of ordinary skill in the art at the time of the invention to

modify Scott et al. (US 6,760,324) in view of Ma et al. by having that which is disclosed as

being taught by Scott et al. (US 6,480,898) above in to predict quality of a call prior to an

actual establishment of any call by a VOIP client (See US 6,480,898 col. 3 ll. 34-38, col. 9 ll.

7-14).

Response to Arguments

6.   In response to Applicant's arguments "Scott does not teach or suggest providing a

VOIP client with a network address of a PSTN to establish connection therewith based, in

part, on PSTN load", Examiner disagrees. Based on Applicants amendment to claims, claims

regarding the argued subject matter within new claims 21 and 20 are rejected under Scott

et al. (US 6,760,324) in view of Ma et al. (US 6,795,867) above. Refer to rejection of these

claims.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to attached US-PTO form 892 for relevant prior art.

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn F. Fleary whose telephone number is (571) 5727218. The examiner can normally be reached on 8:30 - 4:00.
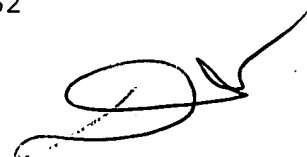
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carolyn F Fleary
Examiner
Art Unit 2152

CFF

Dung C. Dinh
Primary Examiner